Daimler Chrysler Inc /16

Patent Claims

1. Sensor device for a vehicle control system, comprising -a buffer for geographic information, whereby the geographic information is suitable to describe at least one possible route of the vehicle, -an input interface to select a subset of the geographic information stored in the buffer, whereby the selection is effected by the provision of at least one position-related parameter at the input interface, -an output interface to output the subset of the geographic information corresponding to the parameter values provided, whereby the output information is sent for further processing in the vehicle control system.
2. In application of Claim 1, the sensor device is characterized by the fact that the buffer is overwritable.
3. In application of Claim 2, the buffer is characterized by the fact that it is designed as a flash ROM.
4. In application of any one of Claims 1 to 3, the sensor device is characterized by the fact that the input and/or output interface is connected to a vehicle-based information network.
5. In application of any one of Claims 1 to 4, the sensor is characterized by the fact that geographic information is partially and/or incrementally and/or completely changeable.
6. In application of Claim 5, the sensor device is characterized by the fact that the change is performed by means of a data transmission line connected to the buffer.
7. In application of any one of Claims 1 to 6, the sensor device is characterized by that fact that a geographic position of the vehicle and/or a geographic area based

thereon and/or route section based thereon are provided as a parameter value at the input interface.

8. In application of any one of Claims 1 to 7, the sensor device is characterized by the fact that an EDP connection with a vehicle-based telematics platform is provided.

9. In application of any one of Claims 1 to 8, the sensor device is characterized by that fact that an EDP connection with a vehicle-based road impact fees calculator is provided .

10. In application of any one of Claims 1 to 9, the sensor device is characterized by the fact that an EDP connection with a navigation system is provided.

11. In application of Claim 10, the sensor device is characterized by the fact that the navigation system is centrally based.

12. In application of any one of Claims 1 to 11, the sensor device is characterized by the fact that the geographic information is certified.

13. In application of any one of Claims 1 to 12, the sensor device is characterized by the fact that a non straight, parameter-based, partial section of a route is described as a circular arc or a clothoid or a spline.

14. In application of any one of Claims 1 to 13, the sensor device is characterized by the fact that the geographic information is used for one or several routes of the vehicle.

15. In application of any one of Claims 1 to 14, the sensor device is characterized by the fact that the vehicle is a commercial vehicle.

16. In application of any one of Claims 1 to 15, the sensor device is characterized by the fact that it is an intelligent sensor.

17. In application of any one of Claims 1 to 16, the sensor device is characterized by the fact that the geographic information only applies to highways.